

METHOD FOR PROCESSING DATA QUANTIFYING FORCE APPLIED TO ONE OR
MORE KEYS OF A COMPUTER KEYBOARD

ABSTRACT OF THE DISCLOSURE

A computer receives data from a keyboard having one or more keys which cause generation of keyboard data that quantitatively describe the relative force applied to those keys. The keyboard data are transmitted in an HID report containing identifiers for one or more keys that have been pressed and force data for each key. The force data may be a multi-bit value quantifying the key force, or a null indicator signaling that the key is not force-sensing. Keyboard data messages are then prepared which identify keys pressed, contain force data, and may indicate whether the force data updates previous force data. Force updates are only provided to application programs registering for key force data. In other aspects of the invention, key repeat messages are automatically generated for a key held pressed by a user. The key repeat messages are generated at a rate controlled by the amount of force applied to the key.